Application No. 10/784,817 Attorney Docket No. 46500-000120/US

AMENDMENTS TO THE CLAIMS

The following is a complete, marked up listing of revised claims with a status

identifier in parentheses, underlined text indicating insertions, and strikethrough

and/or double-bracketed text indicating deletions.

Listing of the Claims

1. - 24. (Canceled)

25. (Currently Amended) A computer readable medium having a data structure for

managing a data area of the computer readable medium, the data area having a user

area and a non-user area, the user area including a plurality of recording-units, the

computer readable medium comprising:

a first management area storing a first data block including a plurality of

sectors and a second data block including a plurality of sectors, the first management

area being a temporary defect management area, the first data block having first

information including recordation status indicating whether or not each recording unit

of the user area has recorded dataareas and non-recorded areas of the data area and

the second data block having second information including a defect list, wherein

respective last sectors of the first and second data blocks include third-having second

information including a first pointer pointing to an address where $\frac{the-\underline{latest}}{}$ first

information is recorded and a second pointer pointing to an address where latest

second information is recorded, the data block including a plurality of sectors, the

second information being recorded in a last sector of the data block; and

a second management area storing a latest <u>first</u> data block recorded in the first

management area when no further recording can be made on the computer readable

medium, the second management area being a defect management area-

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wherein the data block having the first information and the second information is composed of a single recording unit.

- 26. (Canceled)
- 27. (Canceled)
- 28. (Canceled)
- 29. (Canceled)
- 30. (Canceled)

31. (Currently Amended) A method of recording management data on a recording medium, the recording medium including a data area having a user area and a non-user area, the user area including a plurality of recording-units, the method comprising:

recording a <u>first</u> data block <u>including a plurality of sectors and a second</u>
<u>data block including a plurality of sectors into</u> a first management area, the <u>first</u> management area being a temporary defect management area, the <u>first</u> data block having first information including recordation status indicating <u>whether or not each</u>

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recording unit of the user area has recorded dataareas and non-recorded areas of a

wherein respective last sectors of the first and second data blocks include having

second third information including a first pointer pointing to an address where

the latest first information is recorded and a second pointer pointing to an address where latest second information is recorded, the data block including a plurality of

sectors, the second information being recorded in a last sector of the data block; and

recording a latest first data block recorded in the first management area in \underline{to} a

second management area when no further recording can be made on the recording

medium, the second management area being a defect management area, $% \left(\mathbf{r}\right) =\mathbf{r}^{2}$

wherein the data block having the first information and the second information

is composed of a single recording unit.

32. (Canceled)

33. (Canceled)

34. (Currently Amended) A method of reproducing data from a recording medium, the

recording medium including a data area having a user area and a non-user area, the

user area including a plurality of recording-units, the method comprising:

reproducing at least a portion of data recorded on the recording medium

based on a first data block including a plurality of sectors and a second data block

including a plurality of sectors recorded in a first management area of the recording

medium when further recording can be made on the recording medium, the first

management area being a temporary defect management area, the first data block

including first information including recordation status indicating $\underline{\text{whether or not each}}$

recording unit of the user area has recorded datagreas and non-recorded areas of a

data area and the second data block having second information including a defect list,

wherein respective last sectors of the first and second data blocks includinge

secondthird information including a first pointer pointing to an address where

the latest first information is recorded and a second pointer pointing to an address

where latest second information is recorded, the data block including a plurality of

sectors, the second information being recorded in a last sector of the data block; and

reproducing at least a portion of data recorded on the recording medium based

on a <u>first</u> data block recorded in a second management area of the recording medium

when no further recording can be made on the recording medium, the second

management area being a defect management area,

wherein the first data block recorded in the second management area is based

on a latest first data block recorded in the first management area, and the data block

 $\frac{having\ the\ first\ information\ and\ the\ second\ information\ is\ composed\ of\ a\ single}{}$

recording unit.

35. (Canceled)

36. (Canceled)

- 37. (Currently Amended) The recording computer readable medium of claim 25, wherein the first management area includes space to record a subsequent <u>first</u> data block having the first information different from the first information in the <u>first</u> data block.
- 38. (Currently Amended) The recording computer readable medium of claim 37, wherein the first information in the subsequent <u>first</u> data block reflects changes in the recordation status since the <u>first</u> data block was recorded.
- 39. (Currently Amended) The method of claim 31, further comprising: recording a subsequent <u>first</u> data block in the first management area, the subsequent <u>first</u> data block having the first information different from the first information in the first data block.
- 40. (Currently Amended) The method of claim 39, wherein the first information in the subsequent <u>first</u> data block reflects changes in the recordation status since the <u>first</u> data block was recorded.
- 41. (Currently Amended) The method of claim 34, wherein the first management area includes more than one of the <u>first</u> data blocks and the reproducing step reproduces based on a most recently recorded one of the <u>first</u> data blocks <u>in the first management area</u>.

42. (Currently Amended) The method of claim 41, wherein the most recently recorded one of the <u>first</u> data blocks includes a most current version of the first and thirdseeond information.

- 43. (Currently Amended) The <u>computer readable medium-method</u> of claim 25, wherein only the <u>respective</u> last sector<u>s of the first and second data blocks</u> includes the <u>thirdseeond</u> information.
- 44. (Currently Amended) The method of claim 31, wherein only the <u>respective</u> last sectors of the first and second data blocks includes the <u>thirdsecond</u> information.
- 45. (Currently Amended) The method of claim 34, wherein only the <u>respective</u> last sectors of the first and <u>second data blocks</u> includes the thirdsecond information.
- 46. (Currently Amended) An apparatus of for recording management data on a recording medium, the recording medium including a data area having a user area and a non-user area, the user area including a plurality of recording-units, the apparatus comprising:

a controller configured to control recording of a <u>first</u> data block <u>including</u> a <u>plurality of sectors and a second data block including a plurality of sectors into a first management area, the <u>first</u> data block having first information including recordation status indicating <u>whether or not each recording unit of the user area has</u> recorded <u>data areas and non-recorded areas of the data area and the second data block having</u> second information including a defect list, wherein respective last sectors of and the</u>

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<u>first</u> and <u>second</u> data blocks <u>include having secondthird</u> information including a first pointer pointing to an address when where latest the first information is recorded <u>and</u> a <u>second pointer pointing</u> to an address where latest <u>second information</u> is recorded; and the controller being configured to control recording of a latest <u>first</u> data block recorded in the first management area into a second management area when no further recording can be made on the recording medium, the second management area being a defect management area.

-wherein the data block includes a plurality of sectors and the second information is recorded in the last sector of the data block, and the data block having the first information and the second information is composed of a single recording unit.

47. (Currently Amended) The apparatus of claim 46, further comprising:

a drive configured to write the <u>first</u> data block including the first information and the second information into the first management area and to write the latest <u>first</u> data blocks into the second management area according to the control of the controller.

48. (New) The apparatus of claim 46, wherein the controller is configured to control further recording of a defect list of a latest second data block recorded in the first management area into the second management area when no further recording can be made on the recording medium.

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49. (New) An apparatus for reproducing data from a recording medium, the recording medium including a data area having a user area and a non-user area, the user area including a plurality of recording-units, the apparatus comprising:

a controller configured to control reproducing at least a portion of data recorded on the recording medium based on a first data block including a plurality of sectors and a second data block including a plurality of sectors recorded in a first management area of the recording medium when further recording can be made on the recording medium, the first management area being a temporary defect management area, the first data block having first information including recordation status indicating whether or not each recording unit of the user area has recorded data and the second data block having second information including a defect list, wherein respective last sectors of the first and second data blocks include third information including a first pointer pointing to an address where latest first information is recorded and a second pointer pointing to an address where latest second information is recorded; and the controller configured to control reproducing at least a portion of data recorded on the recording medium based on a first data block recorded in a second management area of the recording medium when no further recording can be made on the recording medium, the second management area being a defect management area,

wherein the first data block recorded in the second management area is based on a latest first data block recorded in the first management area.

50. (New) The apparatus of claim 49, further comprising:

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a drive configured to reproduce the first and second data blocks from the first

management area and to reproduce the latest first data block from the second

management area according to the control of the controller.

51. (New) The apparatus of claim 49, wherein the controller is configured to control

reproducing at least a portion of data recorded on the recording medium further based

on a defect list recorded in the second management area of the recording medium

when no further recording can be made on the recording medium, wherein the defect

list recorded in the second management area is based on a latest second data block

recorded in the first management area.

52. (New) The computer readable medium of claim 25, wherein the second

management area stores a defect list of a latest second data block recorded in the first

management area when no further recording can be made on the computer readable

medium.

53. (New) The method of claim 31, further comprising:

recording a defect list of a latest second data block recorded in the first

management area into the second management area when no further recording can be

made on the computer readable medium.

54. (New) The method of claim 34, further comprising: